Homoranthus tricolor (Myrtaceae), a new species from south-eastern Queensland

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Summary

Bean, A.R. (2009). *Homoranthus tricolor* (Myrtaceae), a new species from south-eastern Queensland. ***Austrobaileya* 8(1): 77–79**. A new species of *Homoranthus* is described, illustrated and diagnosed against related species. It is of very restricted distribution near Mundubbera in south-eastern Queensland.

Key Words: *Homoranthus tricolor*, Myrtaceae, taxonomy, Queensland flora

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Introduction

In September 2007, Trevor Ritchie (DERM, Maryborough) discovered an unusual *Homoranthus*. Photographs and specimens were sent to the Queensland Herbarium. The material could not be matched with any existing specimens, nor would it key to any species in Craven and Jones (1991). It did not match either of the two species described by Hunter (1998), and while very similar to *H. coracinus* in floral characters (Bean 2000), it could be easily distinguished from that species on leaf morphology. This new species is described as new, under the name *H. tricolor*.

Homoranthus tricolor A.R.Bean **species nova** ab omnibus aliis speciebus *Homoranthi* floribus pendulis saepe solitariis, bracteolis grandibus praecipue viridibus persistentibus, hypanthio rubro cylindrico, sepalis nigris laciniatis et petalis praecipue nigris sed ad extremum distale viridibus distincta. **Typus:** Queensland. Burnett District: near junction of Delubra and Cadarga Creeks, 35 km SW of Mundubbera, 19 September 2008, *A.R.Bean 27986 & T.Ritchie* (holo: BRI (1 sheet + spirit); iso: AD, CANB, MEL, NSW, US, *distribuendi*).

Erect spreading shrub to 1.4 m high and 1 m wide. Bark grey, fibrous, slightly furrowed towards base of older plants. Leaves linear to narrowly oblanceolate, 5.3–7.2 mm long, 0.6–0.9 mm wide, green to grey-green, oil glands scattered and readily visible, apex acute to mucronulate; margins entire, not recurved in fresh material, but strongly recurved in dried material. Petioles 0.5–0.7 mm long. Inflorescence borne in upper leaf axils, 1 or 2 flowered. Bracteoles cymbiform, not keeled, 6–7 mm long, 5.3–5.8 mm wide, gland-dotted, mainly green but with white or red margins, apex obtuse, persistent at least until anthesis, enclosing base of hypanthium. Pedicels absent; peduncles 2.2–3.5 mm long. Flowers pendulous; hypanthium glabrous, 5-angled basally, otherwise cylindrical, 6–6.5 mm long, 5–5.5 mm wide, papillose to ruminate and pale green basally, smooth and red distally. Sepals 5, each 5–6 mm long, 1.2–1.5 mm wide, black, entire and slightly tapering in basal half, and with 3–5 black laciniate lobes distally. Petals elliptical, concavo-convex, adnate to the distal part of the hypanthium, 4.7–5.2 × 2.8–3.2 mm, dark purple to black basally and medially, apex and margins pale green, apex obtuse, margins entire. Stamens 10, alternating with staminodes; filaments 0.5–0.8 mm long, anthers globose, basifixed, dehiscing by pores. Style 18–20 mm long, straight or distally curved, creamy white, glabrous except for some simple spreading eglandular hairs below the stigmatic area. Ovules 10–12, collateral in two longitudinal rows. Fruits not seen. **Fig. 1**.

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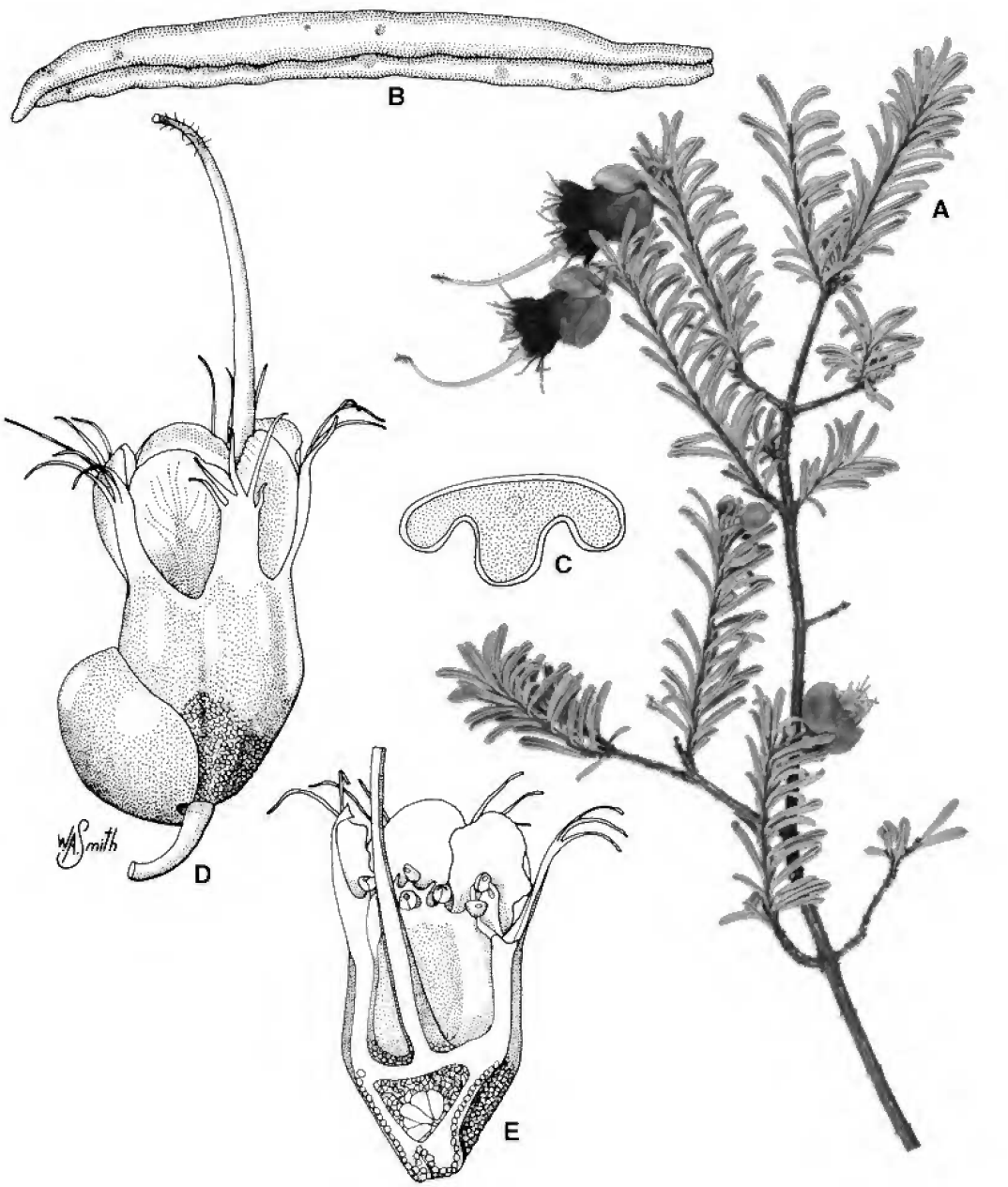

Fig. 1. ***Homoranthus tricolor***. A. flowering branchlet × 1.4. B. lateral view of leaf × 12. C. cross-section of leaf × 24. D. flower with one bracteole removed × 4. E. longitudinal section of flower × 4. All from *Bean 27986 & Ritchie* (BRI). Del. W. Smith.

***Additional specimen examined*: Queensland.** BURNETT DISTRICT: Cadarga Creek, 36 km SW of Mundubbera, Sep 2007, *Ritchie s.n.* (BRI [AQ 742134]).

***Distribution and habitat*:** *Homoranthus. tricolor* is known from a single population near Cadarga Creek in the Mundubbera area of south-eastern Queensland. It inhabits a quartzose sandstone ridge, as a component of shrubby eucalypt woodland. Associated species include *Corymbia watsoniana* (F.Muell.)

K.D.Hill & L.A.S.Johnson subsp. *watsoniana*, *C. trachyphloia* (F.Muell.) K.D.Hill & L.A.S.Johnson, *Grevillea whiteana* McGill., *Acacia calantha* Pedley and *Callitris endlicheri* (Parl.) F.M.Bailey.

***Phenology*:** Flowers are recorded for September only, but the flowering period would certainly extend to October.

***Notes*:** The nearest relative of *Homoranthus tricolor* is not clear. It seems closest to the species which have conspicuous, persistent bracteoles and laciniate sepals, in particular *H. coracinus, H. darwinioides, H. decasetus* and *H. porteri*. These species are closely allied to each other in the phenetic analysis of Copeland *et al.* (2007).

Homoranthus tricolor is readily distinguished from these and all other *Homoranthus* species by its pendulous, often solitary flowers, large mainly-green bracteoles, red cylindrical hypanthium, black laciniate sepals, and petals mainly black but green at the distal end. *H. tricolor* has great potential for horticulture as the flowers are well displayed, relatively large, and exhibit a variety of colours. Pollinators are not known, but native bees and other insects were observed visiting the flowers.

Conservation status: The total known population is estimated to be approximately two hundred plants and is on a Grazing Homestead Perpetual Lease used for grazing cattle. Fire response is unknown. Some plants in the population have trunks around 50 mm diameter, and hence must be decades old. However, a variety of age classes are present. There is no evidence of a decline in numbers of mature individuals.

The recommended conservation status using the Red List criteria (IUCN 2001) is Endangered (criterion D).

***Etymology*:** The Latin epithet *tricolor* (meaning three-coloured) alludes to the three distinct colours on the flowers, *i.e.* green, red and black.

Acknowledgements

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References

Bean, A.R. (2000). *Homoranthus coracinus* (Myrtaceae), a new species from Queensland. *Austrobaileya* 5: 687–789.

Copeland, L.M., Bruhl, J.J., Craven, L.A. & Brubaker, C.L. (2007). Phenetic analyses of *Homoranthus* (Myrtaceae: *Chamelaucieae*) on the basis of morphology. *Australian Systematic Botany* 20: 417–27.

Craven, L.A. & Jones, S.R. (1991). A taxonomic review of *Homoranthus* and two allied species of *Darwinia* (both Myrtaceae: *Chamelaucieae*). *Australian Systematic Botany* 4: 513–33.

Hunter, J.T. (1998). Two new rare species of *Homoranthus* (Myrtaceae: *Chamelaucieae*) from the Northern Tablelands of New South Wales. *Telopea* 8: 35–40.

Iucn (2001). *IUCN Red List Categories and Criteria.* Version 3.1. IUCN Species Survival Commission. IUCN: Gland, Switzerland and Cambridge, U.K.